

STATUS: Effective

POLICY NUMBER: WASTE-0066-NPD

SUBJECT: Alternate Water Supply

AUTHORIZED: Carol S. Comer, Commissioner

SUPERSEDES: New

ISSUING OFFICE(S): Office of Land Quality

ORIGINALLY EFFECTIVE: 03-11-2016

RENEWED/REVISED:

Disclaimer: This Nonrule Policy Document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under [IC 13-14-1-11.5](#). It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to [IC 13-14-1-11.5](#), this policy will be available for public inspection for at least 45 days prior to presentation to the Indiana Environmental Board, and may be put into effect by IDEM 30 days afterward. IDEM also will submit the policy to the Indiana Register for publication.

1.0 PURPOSE

Sometimes a release of hazardous substances results in contamination of water used for drinking, bathing, cooking, or similar purposes. State law provides for actions, including provision of an alternate water supply, that reduce risk arising from such releases. General statutory authority for such actions exists in state environmental laws found in the Indiana Code (see [IC 13-12-3-2](#) and [IC 13-25-5-8.5](#)), while individual programs have specific statutory authority for managing risk through corrective action or remedial action as well (see [IC 13-22-13-1](#) et seq.; [IC 13-23-13-0.2](#) et seq.; [IC 13-24-1-1](#) et seq.; [IC 13-25-4-0.2](#) et seq.; and [IC 13-25-5-1](#) et seq.). State environmental rules in the Indiana Administrative Code have also been promulgated for many programs to assist in risk management during corrective or remedial action (see, for example, [329 IAC 7.1-8-1](#), [329 IAC 9-5-7](#), and [329 IAC 10-21-13](#)). The purpose of this NPD is to promote timely, consistent, and cost-effective application of that authority, by describing:

1. When responsible parties will provide an alternate water supply;
2. Steps necessary to ensure that certain alternate water supplies are fit for their intended use;
3. Procedures for showing that an alternate water supply is no longer necessary; and
4. When IDEM will provide an alternate water supply.

2.0 SCOPE

IDEM's Office of Land Quality (OLQ) will expect the responsible party to provide an alternate water supply wherever a water source is contaminated due to a release of hazardous substances or other contaminants subject to environmental management laws, including those relating to corrective action and/or remedial actions. In some instances, IDEM will provide an alternate water supply on a temporary basis and seek to recover the associated costs from the responsible party or parties. This policy does not apply to naturally occurring concentrations of chemicals in water or to public water systems. All IDEM OLQ sections and responsible parties may use this policy. This policy addresses risk arising from ingestion, dermal contact, and inhalation of vapors arising from water use. Alternate water supplies do not control risks arising from intrusion of vapors from the subsurface into structures.

3.0 SUMMARY

Unless site-specific conditions warrant a different course of action, a responsible party will provide, within 30 days of discovery, an alternate water supply to users whose water source contains release-related chemicals at concentrations above IDEM OLQ screening levels as defined herein. If concentrations of release-related chemicals exceed RMLs, provision of an alternate water supply should occur as soon as reasonably practicable. The alternate water supply should remain in place until at least four consecutive quarters of sample results from the original water source are below IDEM OLQ screening levels. In some circumstances, IDEM will, at its sole discretion, provide an alternate water supply and seek to recover the associated costs from the responsible party or parties, if possible.

4.0 DEFINITIONS

4.1. Agency Contractor – A non-agency entity acting under contract on behalf of IDEM.

4.2. Alternate Water Supply – An uncontaminated water supply that replaces a contaminated water source.

4.3. Bottled Water – Water delivered in bottles or other containers to users.

4.4. Filter System – Equipment used to remove contamination from water.

4.5. IDEM OLQ Screening Level – A concentration of a chemical in ground water that is equal to U.S. Environmental Protection Agency's (U.S. EPA) MCL or, for chemicals without MCLs, that IDEM calculates using a target risk of 10^{-5} for carcinogenic effects, and a hazard quotient of one for noncarcinogenic effects. IDEM posts its screening levels on the web at <http://www.in.gov/idem/landquality/2395.htm>

4.6. Maximum Contaminant Level (MCL) – (1) concentrations in drinking water determined by the U.S. EPA to be acceptable for long-term human consumption; (2) the maximum permissible level of a contaminant in water that is delivered to the free flowing outlet of the ultimate user of a public water system. U.S. EPA posts MCLs on its website at <http://water.epa.gov/drink/contaminants/index.cfm>

4.7. Public Water System – Any water system for the provision of water for human consumption through pipes or other constructed conveyances if such system has at least 15 service connections or regularly serves 25 individuals.

4.8. Regional Removal Management Level (RML) – A concentration of a chemical in ground water derived using a target risk of 10^{-4} for carcinogenic effects and a hazard quotient of three for noncarcinogenic effects. Exceedances of RMLs represent a greater risk and warrant more prompt action than do exceedances of IDEM OLQ screening levels. U.S. EPA posts RMLs on its website at <http://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>

4.9. Responsible Party (RP) – The individual, company, group, or other entity responsible for remediation of contaminants that are known to have been released, or responsible for compliance under state or federal environmental regulations.

4.10. Water Source – For purposes of this NPD, typically a ground water well that provides water used for drinking, bathing, cooking, and other similar purposes.

5.0 ROLES

Specific activities may vary according to site circumstances.

5.1. Agency Contractor

Performs activities as directed by IDEM. Activities may include sampling, sample analysis, provision and maintenance of an alternate water supply, or other related tasks.

5.2. Commissioner

Decides whether IDEM will provide an alternate water supply.

5.3. IDEM OLQ

Identifies situations that may warrant provision of an alternate water supply. Identifies and locates responsible parties and directs them to provide an alternate water supply. Subject to the approval of the Commissioner, may procure and oversee services from agency contractors to provide an alternate water supply. Approves expenditures and resolves disputes. Pursues responsible parties for any costs incurred by IDEM with regard to providing an alternate water supply.

5.4. Property Owner

Owns a contaminated water source under consideration for, or replaced by, an alternate water supply.

5.5. Responsible Party

Works with the IDEM OLQ site manager to ensure protection of health. Provides alternate water supply. Implements appropriate remedies.

6.0 POLICY

This policy has four major components, each discussed below. The numeric criteria described below are provided as general guidelines. Site-specific circumstances, including the degree of risk involved, may warrant a different approach. All sampling and laboratory documentation used to support alternate water supply decisions should include the elements described in Section 3.9.1 of the Remediation Closure Guide. (The Remediation Closure Guide is a separate NPD. It is available, along with other guidance documents, on the IDEM website. Visit <http://www.in.gov/idem/landquality/2388.htm>.)

6.1. When a responsible party will provide an alternate water supply

This decision depends on sampling and analysis of water sources used for drinking, bathing, cooking, or similar purposes and potentially affected by a chemical release. Some professional judgment will be needed to prioritize the action taken based on the actual circumstances and amount of risk involved. If the observed concentration of any release-related chemical in the water source exceeds its U.S. EPA RML, provision of an alternate water supply should occur as soon as reasonably practicable. If the observed concentration does not exceed the RML but is greater than IDEM OLQ's screening level, provision of an alternate water supply should occur within 30 days of discovery of the exceedance. Observed concentrations at or below IDEM OLQ's screening levels generally do not warrant provision of an alternate water supply, though IDEM OLQ may undertake or request continued sampling of water sources where a reasonable risk exists that concentrations may reasonably be expected to exceed IDEM OLQ screening levels in the future.

Where a responsible party has been identified, the responsible party will be expected to collect samples, analyze samples, and provide an alternate water supply as part of any corrective action or remedial action required by applicable law. If IDEM decides to provide an alternate water supply and subsequently identifies a responsible party, IDEM OLQ will include the costs associated with providing the alternate water supply in any cost recovery measures it initiates against the responsible party in accordance with applicable law.

The most common means of providing an alternate water supply include connection to an uncontaminated public water system, installation of a new well in an uncontaminated aquifer, installation of a filter system, or delivery of bottled water. Other approaches and combinations of approaches are possible. Bottled water delivery is often the easiest alternate water supply to provide on short notice, but may prove more expensive than other options over the long term. Responsible parties are generally free to choose their preferred approach¹, as long as it reduces risk to an acceptable level within the appropriate timeframe described in the first paragraph of this subsection.

6.2. Demonstrating that an alternate water supply is fit for its intended use

U.S. EPA and IDEM's Office of Water Quality regulate public water systems (see [327 IAC 8-1-1](#) et seq.), and the U.S. Food and Drug Administration regulates bottled water (see 21 CFR Part 129; 21 CFR Part 165.110). As such, IDEM OLQ presumes any additional testing of public water systems and/or bottled water used as an alternate water supply is unnecessary unless information is obtained to indicate otherwise.

Sampling is a necessary line of evidence to show that a newly installed well is not contaminated. Because ground water contamination often varies seasonally, IDEM OLQ will generally consider four consecutive quarters of ground water data below IDEM OLQ screening levels necessary to show that the new well is an acceptable alternate water supply. Site-specific circumstances may warrant additional sampling. IDEM OLQ's Aquitard Characterization Technical Guidance Document discusses additional lines of evidence useful in determining whether a newly installed well may become contaminated. Once replaced by a new well or connection to a public water system, any contaminated well should undergo permanent abandonment per [312 IAC 13-10](#). (The Aquitard Characterization Technical Guidance Document is available on IDEM's Web page for Remediation Technology and Other Guidance at <http://www.in.gov/idem/landquality/2328.htm>.)

Filter systems have a limited capacity and can become saturated with contamination. When this happens, they are no longer effective. For this reason, filter systems warrant periodic filter replacement and confirmation sampling to show that the filter is still removing contamination. Ongoing quarterly filter change outs and sampling are common, but appropriate sampling and change out frequency will depend on water

usage and filter system capacity.

6.3. Demonstrating that an alternate water supply is no longer necessary

IDEM will presume that a water source, once shown to be contaminated, remains contaminated until IDEM receives evidence showing otherwise. Multiple lines of evidence may support an assertion that ground water contaminant concentrations have attenuated to levels below IDEM OLQ's screening levels. However, sampling data are a necessary component of any such demonstration. IDEM will generally consider four consecutive quarters of ground water data, all below IDEM OLQ screening levels, necessary to show that an alternate water supply is no longer necessary. Site-specific circumstances may warrant additional sampling. If the responsible party and the property owner agree to do so, filter systems may remain in place subject to any specific program requirements (for example, reasonableness and cost effectiveness under the ELTF program).

6.4. IDEM's decision to provide an alternate water supply

While Indiana law does not obligate IDEM to provide a temporary alternate water supply, IDEM may choose to do so in some situations. The decision to provide an alternate water supply, the duration of the water supply, the means by which the alternate source of water is supplied, and all other relevant details, terms and conditions shall be at the sole discretion of the Commissioner. IDEM will include cost among the factors it considers when making this decision. If IDEM and the property owner agree to use a filter system in order to provide a water supply, IDEM will not leave any such system in place without a clear, written agreement that provides that IDEM bears no future responsibility or liability for the system.

If IDEM decides to provide an alternate water supply and subsequently identifies a responsible party, IDEM OLQ will include the costs associated with providing the alternate water supply in any cost recovery measures it initiates against the responsible party in accordance with applicable law.

7.0 REFERENCES

7.1. Federal Laws or Rules:

- A. 40 CFR 300.415(a)(2) and (e)
- B. Appendix D to 40 CFR Part 300
- C. 40 CFR 264.100(e)
- D. 40 CFR 264.101(c)

7.2. Indiana Administrative Code:

- A. [329 IAC 7.1-8-1](#)
- B. [329 IAC 9-5-7](#)
- C. [329 IAC 10-21-13](#)
- D. [329 IAC 10-23-7](#)
- E. [329 IAC 10-29-9](#)
- F. [329 IAC 10-31-7](#)
- G. [329 IAC 10-38-7](#)
- H. [329 IAC 11-4-4](#)
- I. [312 IAC 13-10](#)

7.3. Indiana Statutes:

- A. [IC 13-12-3-2](#)
- B. [IC 13-22-13-1](#)
- C. [IC 13-23-13-0.2](#) et seq.
- D. [IC 13-24-1-1](#) et seq.
- E. [IC 13-25-4-0.2](#) et seq.
- F. [IC 13-25-5-8.5](#)

7.4. Agency Policies:

- A. Remediation Closure Guide. Nonrule Policy WASTE-0046-R1, available at

7.5. Agency Guidance:

A. Aquitard Characterization Technical Guidance Document, available at
<http://www.in.gov/idem/landquality/2328.htm>

or

http://www.in.gov/idem/landquality/files/remediation_tech_guidance_aquitard_characterization.pdf

8.0 SIGNATURES


Carol S. Comer, Commissioner
Indiana Department of Environmental Management

1/13/2016
Date


Bruce H. Palin, Assistant Commissioner
Office of Land Quality

1/13/16
Date


Donald Snemis, Assistant Commissioner
Office of Legal Counsel

1-13-2016
Date

This policy is consistent with agency requirements.

Quality Improvement Program
Office of Planning and Assessment
Office of Compliance Support

1-13-2016
Date

¹ Certain programs may have program specific requirements that may affect the provision of an alternate water supply. For example, work done under the oversight of the Excess Liability Trust Fund (ELTF) must be reasonable and cost effective to qualify for ELTF monies. The RP should check with their project manager(s), site manager(s), or other program contact for such program specific requirements.